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EXAMINER

LOPEZ, F

J W BURROWS CATERPILLAR INC PATENT DEPARTMENT AB 6490

PAPER NUMBER

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ART UNIT

3745

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)
Office Action Summary	09/464,497	A'Hearn et al.
	Examiner	Art Unit
	F. Dani I Lopez	3745
The MAILING DATE of this communication appears on the cover she t with the correspond nce address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status		
1) Responsive to communication(s) filed on	•	
2a) This action is FINAL . 2b) ⊠ Th	is action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4) Claim(s) 1-16 is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-16</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claims are subject to restriction and/or	r election requirement.	
Application Papers		
9) The specification is objected to by the Examiner.		
10) The drawing(s) filed on is/are objected to by the Examiner.		
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved.		
12) The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. § 119		
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of the certified copies not received.		
14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).		
Attachment(s)		
 15) Notice of References Cited (PTO-892) 16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 	19) 🔲 Notice of Informal	ry (PTO-413) Paper No(s) Patent Application (PTO-152)

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Claim Rejections - 35 USC § 112

Claims 2-16 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2 line 3, 6 and 8; claim 4 line 4, and 7; claim 11 line 3, 7, and 10; claim 12 line 3, 8, and 10; claim 13 line 3, both occurrences, 12 and 14; claim 15 line 7,11, 13 and 18; "end" should be --end port--, to agree with claim 1 line 8.

In claim 6 line 4; claim 13 line 7, and 10;, "ends" should be --end ports--, to agree with claim 1 line 8. In claim 6 line 4 --of the first fluid cylinder,-- should be added before "through", to identify which of the head and rod end ports are connected to the pressure chambers. In claim 6 line 11 and 15 "second" should be --first--, to agree with the specification.

In claim 7 line 4, and 7 "end" should be --end port--, to agree with claim 1 line 30.

In claim 8 line 4 "ends" should be --end ports--, to agree with claim 1 line 30. In claim 8 line 4 --of the second fluid cylinder,-- should be added before "through", to identify which of the head and rod end ports are connected to the pressure chambers.

In claim 11 line 10 -first-- should be added before fluid" to identify which cylinder.

Claims not specified are indefinite, since they depend from one of the above claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is and are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by either Kropp or Nakamura.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1 and 4-8 are rejected under 35 U.S.C. § 103 as being unpatentable over Johnson in view of Kropp. Johnson discloses a fluid control system comprising a first fluid circuit connected to a pressure source (12), including a directional control valve (15) having first and second outlet ports (44, 40) connected to head end (18) and rod end (16) ports, respectively, of a fluid actuator, and supply (42) and exhaust ports connected to the pressure source and reservoir, respectively; a pilot control system with a control arrangement (22) connected to a pilot pressure source and the directional control valve, such that the directional control valve is movable from its center position in response to pilot pressure directed thereto from the control arrangement through respective first and second pilot conduits (24, 26); first and second vented check valves (20) between first and second outlet ports, respectively, and head end and rod end ports, respectively, wherein the vented check valves each have a pressure chamber (74) in communication with respective head end and rod end ports through orificed conduits (82); the pilot control system includes first and second two-position spring biased closed valves (90) between the pressure chamber of the first and second vented check valves, respectively, and the reservoir; wherein the first and second two-position valves are movable to an open position in response to pilot pressure in the first and second pilot conduits, respectively; wherein when the directional control valve is in the center position, the supply and exhaust ports and first and second outlet ports are

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blocked from one another (which means that the supply port is blocked from the first and second outlet ports and the head end and rod end ports are blocked from the exhaust port), when in a first position, the supply and exhaust ports communicate with the second and first ports, respectively, and when in a second position, the supply and exhaust ports communicate with the first and second ports, respectively; but does not disclose that there is a second fluid circuit connected to the pressure source, in parallel with, and identical to, the first fluid circuit. Note that although Johnson shows each exhaust cutout (38, 46) is connected to the reservoir (14) by a separate line, one of ordinary skill would recognize that they are usually connected together within the body of the valve housing (using an end plate) and having one connection connected by one line to the reservoir; with this connection being considered the exhaust port.

Kropp teaches, for a fluid control system comprising a first fluid circuit connected to a pressure source, including a directional control valve (e.g. 8) controlling an actuator (e.g. 12); that there is a second fluid circuit (e.g. including 18, 22) connected to the pressure source, in parallel with, and identical to, the first fluid circuit, for the purpose of using the pressure source for multiple actuators on the same machine.

Since Johnson and Kropp are both from the same field of endeavor, the purpose disclosed by Kropp would have been recognized in the pertinent art of Johnson. It would have been obvious at the time the invention was made to one having ordinary skill in the art to include a second fluid circuit connected to the pressure source of Johnson, in parallel with, and identical to, the first fluid circuit, as taught by Kropp, for the purpose of using the pressure source for multiple actuators on the same machine.

Conclusion

Claims 2. 3 and 9-16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. Note that Gay et al discloses a diverter valve (35), as claimed in claim 2, but there is no motivation to combine Gay et al with either Johnson or Kropp. Note that Schmon and Hunger et al discloses valves (57, 101, respectively) similar to the diverter valve claimed in claim 2,

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but does not meet all of the limitations of claim 2. Reip discloses a standard pressure relief valve (50).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schexnayder and Ikei et al refer to fluid systems with multiple circuits.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is (703) 308-0008. The examiner can normally be reached on Monday-Thursday from 6:30 AM -4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on (703) 308-1044. The fax number for this group is (703) 308-7763. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0861.

F. Daniel Lopez Primary Examiner Art Unit 3745 May 8, 2001